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# LANDSCAPING

# MINNESOTA HOMES

C. Gustav Hard  
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University of Minnesota



The most effective landscaping results from a carefully planned project. This bulletin provides information that can lead to a functional, yet beautiful landscape setting. It assumes the homeowner will design the landscape setting. It gives guidelines for development of the design. Three topics are discussed: how to plan the landscape design; how to begin the landscape planting; how to live in and use the landscape design.

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## Plan The Landscape Design

Good design is accomplished with the use of lines, colors, textures, and forms. These elements can be blended into the mood or theme the homeowner chooses.

The personality and needs of residents, the lay of the lot, and the architectural style of the house are all significant in determining the design. Ultimately, the landscape design should reflect ideas and interests of those who will live with it, but still conform to elements of good design. Landscaping should reflect living needs yet still remain functional. Good landscaping is the organization of landscape elements for function and beauty.

Changing lifestyles necessitates changes in design. The switch in priorities as the family members mature or approach retirement is common motivation for changing the landscape design. Families tend to have greater need for recreation space while children are young. As families grow

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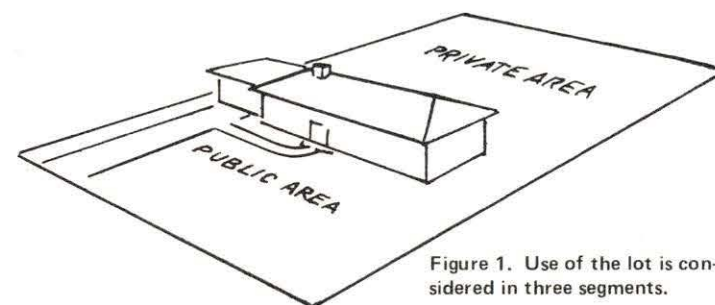


Figure 1. Use of the lot is considered in three segments.

those recreation needs change. The family may be reaching out into the community parks and schools.

Many homeowners are "away-from-home" oriented. They like the feeling of ownership and sense of place but are not interested in the upkeep activities and landscape maintenance necessary as part of the landscape plan. For them, minimum maintenance and recreation alternatives become part of the design criteria.

Energy resources and costs are influencing design. As families adjust to higher costs for energy, several trends become apparent.

- The house and lot become more of a center for entertaining and recreation—the landscape must serve as an extension of the architecture.

- More people are participating in residential landscape for physical exercise and through vegetable and flower gardening using their energy toward productive use of leisure time.

- Living outdoors and being close to the elements of nature is highly popular today as one lifestyle.

Landscape design goes beyond providing a setting for the house. It sets the stage for a style of living. It helps the owner make the best use of the site.

Outdoor space represents the total property and the area above and beyond the lot. To use this space, views from the lot must be considered. Adjoining spaces may need to be concealed or revealed. For example, plantings may be used to suggest outdoor walls and tree canopies provide a partial ceiling for outdoor living rooms.

The functional use of the lot is considered in three segments: public, private, and service areas (figure 1). The public area is usually in front between the house and the street. It is the area seen by the passers-by. Because this area is in constant view, it should be simple in design, easy to maintain, and present a pleasing picture.





Figure 2. The public area is seen by passersby.

## PUBLIC AREA

The public area of the landscape serves several important design uses. In the traditional sense, it provides the setting for the house in creating a landscape picture. However, there are other purposes that must be served. Most houses built today have auto and pedestrian access through the public area. The attached garage requires driveway and parking space. These are hardly elements of beauty but nevertheless must be included in the design. The public area (figure 2) should provide a comfortable sense of entry. This is accomplished through the arrangement of driveways and sidewalks. Where sidewalks are omitted and driveways are used as a connection from the street, driveways must be wide enough to allow people movement around parked vehicles. A 20-foot width for a double drive is usually adequate and a 12-foot width is the minimum for a single car.

The connecting sidewalk width should be a minimum of 3 feet. Two people should be able to walk comfortably side by side.

The sense of entry can be accomplished in several ways. Arrival

through a small garden area or coming into a canopy formed by trees or architectural elements such as a wall or partial screen helps to establish the entry. The sense of entry begins as a visual experience in the public area and is carried through the entrance of the house.

The physical comfort associated with entry must be considered. Awkward steps and landings can destroy a comfortable feeling. The treads for steps should measure at least 11 inches wide. The landing or stoop by the door should be large enough for the door to swing freely and not impede circulation. A minimum door stoop size is 4 feet out from the door and 5 feet wide.

The driveway is a major element within the public area. It also represents a major cost. Because this is true, the driveway can be designed to be versatile. Many recreational needs can be met if planned as part of the driveway construction. Games such as volleyball, badminton, singles tennis, basketball, free throw, tetherball, four-square, and even shuffleboard can be accommodated.

The lawn, foundation plantings (meaning plants at the base of the walls of a building), and permanent trees are

important elements of the public area. The lawn should be a broad, uninterrupted expanse of grass, the so-called canvas for the landscape picture.

Because the lawn is often the most expensive part of the landscape development, the soil should be carefully prepared, suitable grass seed planted, and ample outlets provided for easy watering (Extension Bulletin 366: The Home Lawn).

The purpose of the foundation planting is to blend the house into the lawn and to make the house appear more stable by softening architectural lines. The house should be "in the site not on it."

Diversity of plant materials provides interest in foundation planting. Contrasting textures, shapes, and forms of plant materials adds variety when carefully used. However, by selecting many different kinds of plants, unity can be destroyed and the result will be an uninteresting hodgepodge.

Trees are important in the public area to form a frame for the landscape planting. They serve to break the roofline against the horizon; they seem to extend the roofline when the house is small; trees can cast shadows over concrete driveways to soften the surface and add interest and comfortable shade. Since trees are permanent features of the landscape, care is needed in selecting and locating them so they will fulfill the intended purpose. Besides helping frame the house, trees may be used to give visual balance to the design. This most important function is to provide shade and conserve energy for cooling.

The size and form of the mature tree should be known before making a selection. If the house and yard are small, medium and small trees keep the entire planting in scale. If the house is large, larger varieties are best.

Trees used to frame the house should not be planted directly in front of the house but at angles from the corners. On small lots the space between the house and the lot line often is limited. If this is true, the framing tree can be

planted at mid-point between a line with the house and the lot line.

Many houses built during the 1950's and 1960's included rooms with living space facing into the public area. This introduction of the "picture window" created a design dilemma because of the need to create a significant view looking from the inside to the outside. Often the entry court can serve as an interest feature as it relates to the interior of the house. Hedging or fencing can serve as a background for the development of a terminal view. Isolated, uncoordinated flower beds or borders unconnected either to entry or view should be avoided.

## PRIVATE AREA

The second area to consider in the landscape plan is the enclosed area to give privacy for living. In this area, individual expression can come both in design and materials grown. In contrast to the public areas, where simplicity and ease of maintenance are especially important, the private area provides the setting for private living and gardening.

The private area is usually enclosed with screening shrubs. These provide a logical boundary for the landscaped area. Privacy may be attained with screen fences. Where space is limited, a wooden screen or vined fence may be a more efficient use of space.

When shrubbery or other screens are used, the area beyond the designated landscaped space does not require meticulous maintenance. However, weeds and grasses must be under control. This is quite often a problem in rural areas where space is unlimited. It is necessary to divide the landscape area around the house from farmyard or vegetable garden or orchard areas.

The importance of proper backgrounds of shrubs and other flowering plants or trees cannot be overemphasized. A green background is best for many flowering materials. This is nature's way of creating harmony in the garden.

Most houses being built today have the living space facing the private area.



This means that contact with the natural environment is there all months of the year. Plants are useful to express seasonal changes: fall color and spring flowers; fruited shrubs that will entice birds both winter and summer. Flowers have a progression of bloom through the seasons. Snowdrops and tulips flower in early spring; fall can be accentuated with garden chrysanthemums.

Winter need not be drab. Evergreens help to enliven the winter scene. Bark color and textures help to provide variety against a background of snow, which in itself can be thought of as dynamic sculpture as the wind changes its form from day to day.

It is in the private area where colorful displays of annual, perennial, and bulbous plants are brought together. Careful arrangements of border using the slope of the lot, permanent trees, or selected areas for outdoor living provide a natural blending of border contour for the landscape design. A careful study of the plants which are to be grown should be made to be sure the color

combinations, both of flowers and foliage, are harmonious. Autumn colors should be considered so that the seasonal color change is used to best advantage.

Trees in the private area are used for shade. Shade is needed for the house, the patio, and for comfort in the outdoor living area. Trees can provide a background for the house, a screen for unsightly views, a frame for desirable views, and a background for shrub plantings.

The lawn is an important element of the private area. It should be an open expanse of grass. By providing this feeling, space is often created even on a limited size lot. Lawns should be free of insignificant flower beds, pools, and other ornaments which make lawn mowing difficult and destroy the serenity of the design.

Private areas of the landscape development can be planned to make outdoor eating pleasant. Outdoor eating spaces are usually screened by a shrub border or a privacy fence. This space could also include an outdoor grill, chairs, tables, and other accessories.

This center for outdoor living and entertaining may be a patio or a deck. With the public becoming more energy conscious, ways are being found to improve quality of living within the boundaries of the landscape. The patio or deck allows close contact with trees, shrubs, and flowers. It is like a walk through nature, but within reach of the house without energy consuming travel.

The patio has diverse use because some activities require shade, others sun. During the warmest time of day, shade is often appreciated (figure 3). In spring and fall, as evening approaches, the sun's warmth can help to extend the hours of patio usefulness. Study the sun and shade pattern before locating the patio and shade planting of accompanying trees or shrubs.

Privacy and security are major concerns. Visual privacy can be accomplished with hedging, informal shrub plantings, or screen fences (figures 4 and 5). In heavily trafficked areas, both vehicular and pedestrian security fences and walls can add to the sense of safety and well-being.

Often on small, narrow lots, screen fences are more space efficient and increase the useful space for vegetable gardening and recreation (figure 6).

## SERVICE AREA

The third area to consider in the landscape development is the service area. Not all landscape designs need a service space because many of these elements can be integrated into private areas. However, service areas can accommodate such items as the garbage disposal, clothesline, trash burner (if allowed), garden equipment storage, and compost heap. The plantings should be simple and consist chiefly of screen plantings to hide unsightly objects. There should be room for a delivery truck or other vehicle.

Many homeowners are interested in adding a fruit and vegetable garden to the landscape. Usually if the garden takes a sizable space within the design, it is best to consider a special place for this purpose. However, if it is to be a small garden it can be integrated into the landscape plan.

Figure 3. During daytime heat, shade is appreciated.

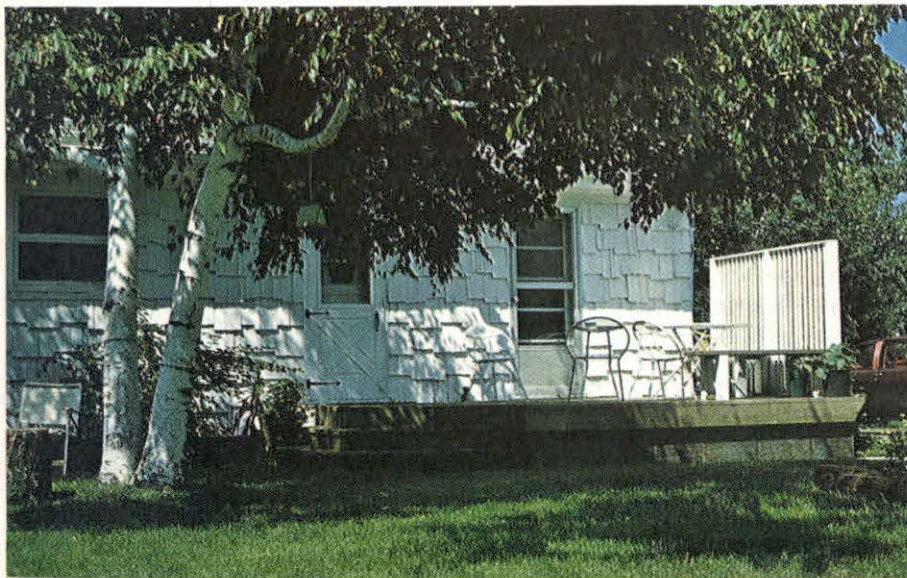


Figure 4. Informal plantings give visual privacy.

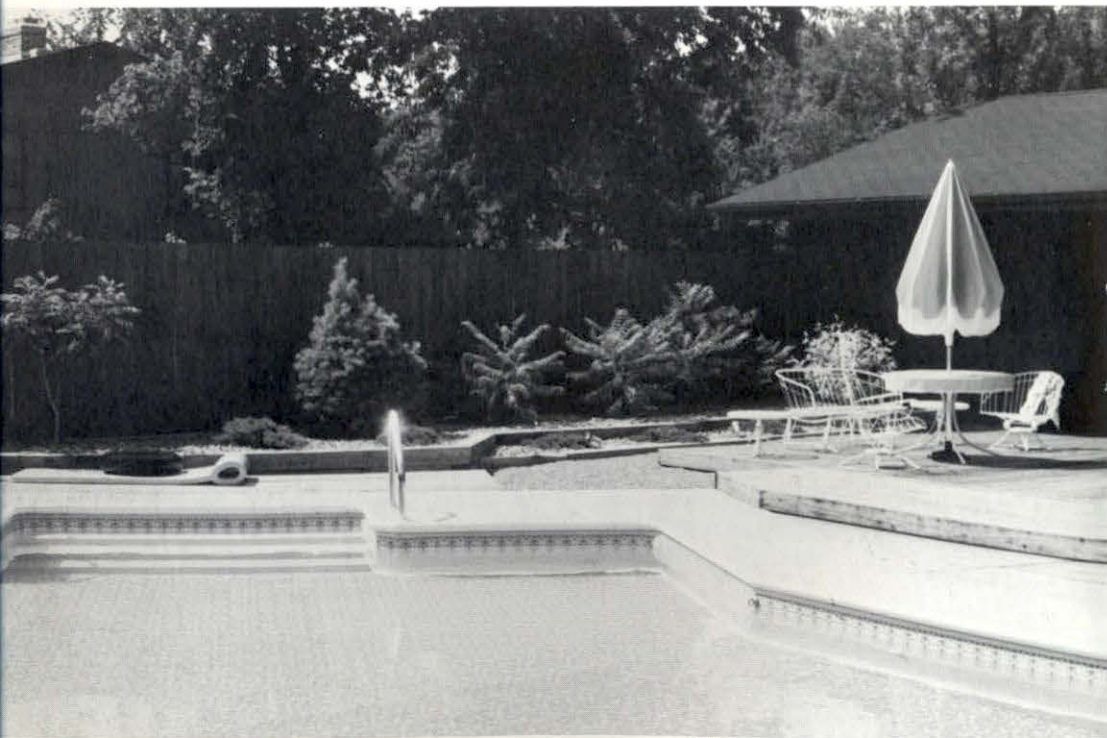






Figure 5. Screen fences accomplish privacy.

Figure 6. Fences are space efficient, too.



## ANALYZE THE HOUSE

A thorough site analysis is one of the most important steps in landscaping. It is important to have a good understanding of the style of architecture involved. Is it a one-level house? Does it have any dominant features, such as a special style or motif?

In building a new house, the location is important. It should have ample circulation on all sides. Drainage is another consideration when placing the house on the lot. There should be at least 25 feet from the main roadway. This is to provide ample space in front of the house for landscaping the public area. It is important to take advantage of the best possible views from the living sections of the house.

The slope of the lot can be studied for interesting effects in the design. This might limit the amount of fill and leveling necessary for a useful setting.

As needs change, play areas can be converted to garden space, but these conversions should be included in the

original planning of the landscape design.

The views which are part of the original site should be considered. Sunsets and lake views are beautiful and should not be destroyed by misplaced trees and shrubs. Within the landscape design it is important to incorporate focal points so there will be several points of interest (figure 7).

Space can be created by careful selection of materials. Where the lot is extremely large, the visual size can be reduced by planting taller and darker foliated materials at the ends of the lot.

Space can also be created by providing a focal point which is small in proportion to other materials. Such things as ornamental pools, bird baths, and other garden ornaments serve this purpose.

Another technique for creating the illusion of space is to locate large plants or objects closer to the house. As a result, small objects in the distance seem to diminish in size, giving the illusion of greater distance or space.

## Begin the Landscape Planting

The preparation of a landscape plan is the most important step of the landscape development. It is much easier to move a tree or shrub on paper than after it has been planted in the wrong place. This plan shows an outline of the work to be done and how the landscaped areas will look after the work is completed. It need not be an elaborate drawing.

To prepare a plan, use cross sectioned (graph) paper with a scale ratio of 1 inch equaling 10 feet. It is possible to duplicate the landscaping setting accurately on this type of paper while maintaining natural relationships between house, boundary, and existing landscape materials.

Measure the size of the grounds and plot the dimensions on the graph paper. Locate the house on the plan. This can be done by measuring in from

front and side boundaries. Windows and doors should be located accurately and the window height noted.

In the same way, locate existing drives, trees, shrubs, etc. Always measure along and at right angles to some established line to obtain an accurate plan of the grounds. The design areas will be obvious almost immediately (figure 8).

Before beginning the design, the homeowner should consider how much money is available to complete the landscaping. It is wiser to plant fewer things of better quality than to plant many things of poor quality. Personal interest and skills in gardening should also be considered. Shrubs and grass require much less maintenance than annual or perennial flowers. Appropriate landscaping definitely adds to the total value of a house.





Figure 7. Several focal points make a more interesting view within the landscape design.

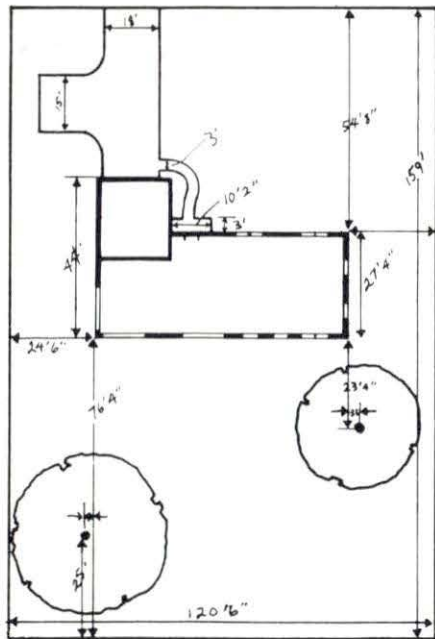


Figure 8. Design areas can be located first on paper.

Figure 9. Perennial and annual borders can substitute for shrubs.

Minnesotans should choose materials they enjoy by studying (when available) Extension Bulletins 258: Evergreens; 267: Woody Plants for Minnesota; 295: Perennials for Minnesota; and commercial nursery and seed catalogs. Visiting neighbors, friends, and local nurseries to see the various plants growing is helpful. An excellent study spot for landscape materials is the University of Minnesota Landscape Arboretum located on Highway 5 near Victoria and Chaska, Minnesota. Trees and shrubs could be part of the living environment for many years so careful choices are essential.

After selecting favored plants, they should be checked for hardiness and availability. It is extremely important to find out about availability. Many landscape plans result in poor planting

simply because materials are ordered when they are not available and undesirable substitutions are made. Winter survival (hardiness) is another essential characteristic for trees, shrubs, and perennial flowers in Minnesota.

Is there a proper procedure in establishing the landscape plan? Any method of approach to the development of the landscape should be based on the thought of permanence. Any duplication of effort is costly, both in money and time. Therefore, permanent materials should be placed first and the temporary materials afterwards. The following order of development will be useful.

## The Lawn

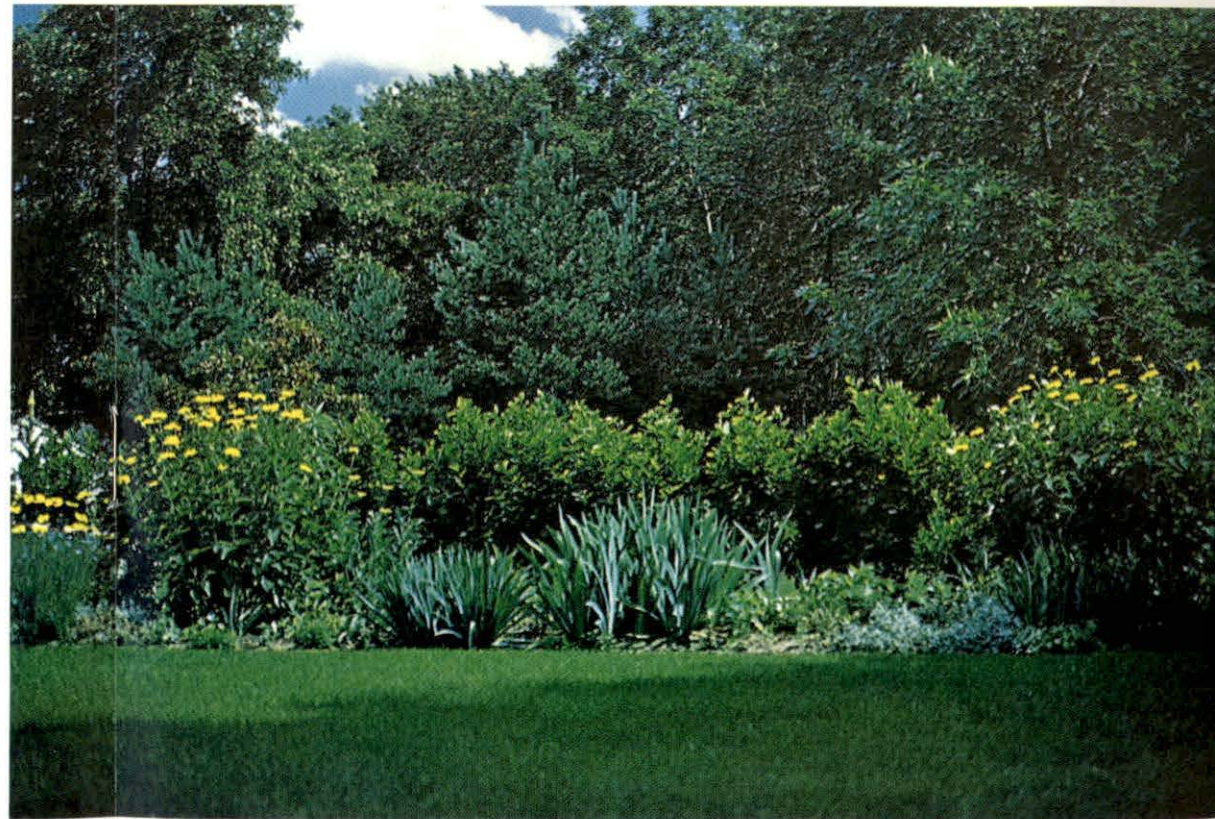
The lawn should be established first because it provides a carpet for the entire landscape. It takes from 1 to 2

years to develop a good lawn. By starting with the lawn there is the satisfaction of having the whole development green the first year.

Sodding may be considered an alternative to seeding. Sodding is not a substitute for careful soil preparation—it is another method of establishing a lawn (Extension Bulletin 366: The Home Lawn).

## Trees and Foundation Plantings

Since permanent trees and foundation planting grow slowly, they should be planted as early in the development of the plan as possible. The cost is going to be relatively high. It may be necessary to delay this planting until the second year. If funds are available to do the landscape planting in 1 year, permanent trees could be planted before finishing the





grade and sowing grass seed or sodding.

These two steps complete development of the public area rather early in the total development.

### Shrubs and Shrub Borders

These materials can be added successfully year after year. This would eliminate having to buy all materials at one time. The importance of the planting plan should be emphasized at this point—it gives continuity to the landscape plantings added each year. Without the plan there is little direction to planting.

### Perennials and Annuals

Perennial and annual borders can be added at any time during the landscape development. Often, they are used as substitutions in the shrub border until it is possible to purchase shrubs (figure 9).

Information on annual and perennial flowers is available in Bulletin 295: Perennials for Minnesota. University of Minnesota Extension publications can be obtained at County Extension offices.

### Planting the Landscape

Planting the landscape development usually takes place during either of two seasons. Spring is the longest season for planting. As soon as the soil is workable, planting can begin. Fall is the second planting season. Fall planting should be done early so the plant can establish itself before the ground freezes.

The nursery industry can now provide potted shrubs to extend the planting season. These plants usually can be installed successfully throughout the growing season if well cared for after planting.

The spacing of shrubs is important in establishing the landscape plan. Shrubs should be planted approximately 4 feet from the foundation of the house, depending on shrub size. Large shrubs that reach 5 feet in height should be

planted farther away from the foundation. This spacing is necessary because soil next to the foundation is quite dry and the shrubs do not have the chance to develop their natural form.

The height and breadth of the shrubs at maturity determine spacing. Shrubbery is often planted too close together because of the small size of new stock and correct spacing appears too far apart. After a few years when shrubs have matured it may be necessary to remove plants and perhaps this will ruin the landscape effect.

A suggested spacing follows:  
large spreading shrubs—8 to 12 feet in height, space 7 to 8 feet apart;  
medium shrubs—5 to 8 feet in height, space 5 to 7 feet apart;  
small shrubs—less than 5 feet in height, space 2 to 5 feet apart.

Different species of trees and shrubs can form a combination planting. These combinations are brought together by giving consideration to the texture, height, summer and autumn colors of the various shrubs. This information should be included in the basic plan and the plantings made accordingly.

Soil tests can be made to determine whether the soil is in a high state of fertility, contains a good quantity of organic matter, and has good drainage. Soil improvements are easier to make before planting. The County Extension office can provide the soil test report form and information on how to have soil tested through the University of Minnesota. Extension offices are usually located in the county courthouse and in telephone book listings are under county government offices.

Water is important for the new planting. In setting new shrubs, a ring of soil around the shrub will hold a quantity of water until it soaks into the roots.

Water should not stand around the new plants for any length of time. Heavier soils, such as clay, tend to hold water longer and so less frequent watering is required.

## Live in the Landscape Design

Artificial lighting is one of the best ways to provide added use of the outdoor space. Not only does it allow activity during the evening but it can add much to the beauty of the garden itself. The correct lighting of various plants can accent beauty and add interest to landscaping.

By including special play areas in the landscape development, more at home activity is possible. As described earlier, the driveway can serve a multi-use function. In the same way the patio or deck can provide various recreational opportunities.

Outdoor eating can be easier if there is a barbecue pit or outdoor grill. This should be conveniently located so it is easily used. The patio should be close

to the kitchen and planned so that it won't clutter the design. Many brick and lumber companies furnish excellent plans for an outdoor barbecue pit.

Minnesota landscape should be planned to extend interest through the winter season with plant materials that provide exciting contrast to the cold weather scene. Trees and shrubs with texture and color in bark, evergreen foliage, interesting shapes, or fruits and pods add zest to the scene. Shelter and food attract birds as living additions to the winter landscape. They provide activity, color, and each has its own feeding habits. Winter birds can provide extraordinary interest to the home landscape.

## Woody Plants for Minnesota<sup>1</sup>

### Evergreens (narrow-leaved)

#### Trees for Lawn Specimens, Screens, or Background Plantings

- \*White Fir (*Abies concolor*)
- Norway Spruce (*Picea abies*)
- White Spruce (*Picea glauca*)
- Colorado Spruce (*Picea pungens*)
- \*Austrian Pine (*Pinus nigra*)
- \*Ponderosa Pine (*Pinus ponderosa*)
- Red Pine (*Pinus resinosa*)
- Scotch Pine (*Pinus sylvestris*)
- \*Douglas fir (*Pseudotsuga menziesii*)
- Eastern Arborvitae (*Thuja occidentalis*)

\*Plant on heavier soils south of Twin Cities.  
<sup>1</sup>See Extension Bulletin 267 Woody Plants for Minnesota for hardiness zones.

#### Medium, Upright Specimens for Foundation and Border Plantings\*

- Eastern Red Cedar (*Juniperus virginiana* and varieties)
- Rocky Mountain Juniper (*Juniperus scopulorum* and varieties)
- +Japanese Yew (*Taxus cuspidata*)
- +Siberian Arborvitae (*Thuja occidentalis* 'Wareana')

\*May require shearing to keep them compact.  
+Requires a moist, protected spot; good on the north side of a house.

#### Low or Spreading Forms for the Foundation and Border Plantings

- Pfitzers Juniper (*Juniperus chinensis* 'Pfitzeriana')



Juniperus chinensis 'Procumbens'  
Common Juniper (Juniperus communis depressa)  
Savin Juniper (Juniperus sabina)  
Mugho Pine (Pinus mugo variety mugo)

- \*Japanese Yew (Taxus cuspidata—dwarf or spreading varieties)
- \*Woodward Globe Arborvitae (Thuja occidentalis 'Woodwardi')
- Maney Juniper (Juniper chinensis 'Maneyi')

\*Requires moist, protected sites; will grow in shade.

### Creeping Forms for Rock Gardens, Banks, and Foundation Plantings

Waukegan Juniper (Juniperus horizontalis 'Douglasi')  
Scandia Juniper (Juniperus sabina 'Skandia')  
Andorra Juniper (Juniperus horizontalis 'Plumosa')

### Deciduous Trees and Shrubs

#### Large Trees for Large Grounds—60 or more feet in height

Norway Maple (Acer platanoides and varieties)  
\*Silver Maple (Acer saccharinum and varieties)  
Sugar Maple (Acer saccharum)  
Common Hackberry (Celtis occidentalis)  
Green Ash (Fraxinus pennsylvanica lanceolata)  
+Common Honeylocust (Gleditsia triacanthos inermis)  
Kentucky Coffeetree (Gymnocladus dioica)  
Black Walnut (Juglans nigra)  
American Linden or Basswood (Tilia americana)

\*Brittle; do not plant near buildings.  
+Not reliable north of the Twin Cities.

#### Medium to Small Trees for Small Grounds—25 to 60 feet in height

Ohio Buckeye (Aesculus glabra)  
River Birch (Betula nigra)  
+Weeping Willow (Salix alba var. tristis)

Russian Olive (Elaeagnus angustifolia)  
Ironwood (Ostrya virginiana)  
\*Bolleana Poplar (Populus alba 'Pyramidalis')  
Littleleaf Linden and selections (Tilia cordata and varieties)

\*Narrow, upright habit of growth.  
+Plant only in moist, protected sites

#### Very Large Shrubs or Small Trees for Border Plantings or Lawn Specimens—12 to 25 feet in height

Amur Maple (Acer ginnala)  
Shadblow Serviceberry (Amelanchier canadensis)  
Siberian Peashrub (Caragana aborescens)  
Cockspur Hawthorn (Crataegus Crus-galli and thornless form)  
European Euonymus (Euonymus europaeus)  
Pagoda Dogwood (Cornus alternifolia)  
Flowering Crabapples (Malus—varieties and species 'Sparkler,' 'Spring Snow,' 'Flame,' 'Siberian,' 'Radiant,' 'Vanguard,' 'Red Splendor')  
Shubert Chokecherry (Prunus virginiana 'Shubert')  
Japanese Tree Lilac (Syringa reticulata)

#### Large Shrubs for the Border and Foundation Plantings—8 to 12 feet in height

1. For moist, protected sites
  - \*Eastern Wahoo (Euonymus atropurpureus)
  - Sweet Mockorange (Philadelphus coronarius)
  - American Elder (Sambucus canadensis and varieties)
  - \*Wayfaring Bush (Viburnum lantana)
  - Nannyberry (Viburnum lentago)
  - American Highbush Cranberry (Viburnum trilobum)

2. For open, exposed sites
  - Zabel's Honeysuckle (Lonicera korolkowi 'Zabeli')
  - +Smooth Sumac (Rhus glabra)
  - +Staghorn Sumac (Rhus typhina)
  - Silver Buffaloberry (Shepherdia argentea)

Late Lilac (Syringa villosa and its hybrids)  
Common Lilac (Syringa vulgaris and its hybrids)

\*Suitable for foundation plantings.  
+Forms suckers.

#### Medium Shrubs for Border and Foundation Plantings—5 to 8 feet in height

1. For moist, protected sites
    - Siberian Dogwood (Cornus alba sibirica)
    - \*Gray Dogwood (Cornus racemosa)
    - Redosier Dogwood (Cornus sericea)
    - \*Winged Euonymus (Euonymus alatus)
    - Peegee Hydrangea (Hydrangea paniculata grandiflora)
    - Virginalis Mockorange (Philadelphus virginalis)
    - Common Ninebark (Physocarpus opulifolius)
    - Clove or Golden Currant (Ribes odoratum)
    - \*Arrowwood (Viburnum dentatum)
  2. For open, exposed sites
    - \*Russian Peashrub (Caragana frutex)
    - Hedge Cotoneaster (Cotoneaster lucida)
    - \*European Cotoneaster (Cotoneaster integerrima)
    - Cistena Sandcherry (Prunus cistena)
    - \*Nanking Cherry (Prunus tomentosa)
    - \*Flowering Plum (Prunus triloba plena)
    - Arctic Willow (Salix arctica)
    - Miss Kim Lilac (Syringa velutina 'Miss Kim')
    - Bridal Wreath (Spiraea vanhouttei)
    - \*Chinese Lilac (Syringa chinensis)
- \*Suitable for foundation plantings.

#### Small Shrubs for Foundation and Border Plantings—3 to 5 feet in height

1. For moist, protected sites
  - \*Japanese Barberry (Berberis thunbergi)
  - Annabelle Hydrangea (Hydrangea arborescens grandiflora 'Annabelle')
  - \*Lemoine Mockorange (Philadelphus lemoinei)
  - \*Dwarf Ninebark (Physocarpus opulifolius nanus)

\*Alpine Currant (Ribes alpinum)  
Ash-leaved Spirea (Sorbaria sorbifolia)  
Billiard Spirea (Spiraea billiardii)  
Glossy Black Chokeberry (Aronia melanocarpa elata)

#### 2. For open, exposed sites

- \*Flowering Almond (Prunus glandulosa)
  - Threelobe Sumac (Rhus trilobata)
  - \*Rugosa Rose (Rosa rugosa and hybrids)
  - \*Threelobe Spirea (Spiraea trilobata)
  - \*Garland Spirea (Spiraea arguta)
  - Pygmy Caragana (Caragana pygmaea)
  - Meyer Lilac (Syringa meyeri)
- \*Suitable for foundation plantings.

#### Dwarf Shrubs under 3 feet for Foundation and Border Plantings

1. For moist, protected sites
    - \*Lemoine Deutzia (Deutzia lemoine)
    - \*Anthony Waterer Spirea (Spiraea bumalda 'Anthony Waterer')
    - \*Froebel Spirea (Spiraea bumalda var. 'Froebeli')
    - \*Chenault Coralberry (Symphoricarpos chenaulti)
    - \*Indiandcurrant Coralberry (Symphoricarpos orbiculatus)
    - \*Common Snowberry (Symphoricarpos albus)
    - \*Littleleaf Mockorange (Philadelphus microphyllus)
  2. For open, exposed sites
    - \*Bush Cinquefoil (Potentilla fruticosa and varieties)
    - \*Russian Almond (Prunus tenella)
- \*Suitable for foundation plantings.

### Woody Vines

#### For Brick, Stone, or Stucco Buildings

1. For south and west sides
  - Engelmann Creeper (Parthenocissus quinquefolia 'Engelmanni')
2. For north and east sides
  - Japanese Creeper or Boston Ivy (Parthenocissus tricuspidata)

#### For Fences, Arbors, Porches, etc.

Dutchmans Pipe (Aristolochia siphon)  
American Bittersweet (Celastrus scandens)



# Plants for Special Purposes

## Trees and Shrubs for Clipped Hedges

	Spacing	Height feet	Width
Amur Maple ( <i>Acer ginnala</i> )	2-3	6-10	3-5
Japanese Barberry ( <i>Berberis thunbergii</i> )	1½-2	2-3	2-3
Redleaf Barberry ( <i>Berberis thunbergii</i> 'Atropurpurea')	1½-2	2-3	2-3
Pygmy Caragana ( <i>Caragana pygmaea</i> )	1-2	2-3	1½-2
Peking Cotoneaster ( <i>Cotoneaster acutifolius</i> )	2-3	3-5	2-4
Dwarf Winged Euonymus ( <i>Euonymus alatus compactus</i> )	1½-2	3-4	3-4
Zabel's Honeysuckle ( <i>Lonicera korolkowi</i> 'Zabelli')	2-3	4-6	3-5
Clavey's Honeysuckle ( <i>Lonicera claveyi</i> )	1½-2	2-3	2-3
Dwarf Ninebark ( <i>Physocarpus opulifolius nanus</i> )	1½-2	3-4	3-4
Alpine Currant ( <i>Ribes alpinum</i> )	1-1½	2-3	1½-3
Chinese Lilac ( <i>Syringa chinensis</i> )	2-3	5-7	2-4

## Trees and Shrubs for Informal Hedges

	Spacing	Height feet	
Amur Maple ( <i>Acer ginnala</i> )	4-5	12	
Japanese Barberry ( <i>Berberis thunbergii</i> )	2-3	4	
Redleaf Barberry ( <i>Berberis thunbergii</i> 'Atropurpurea')	2-3	4	
Pygmy Caragana ( <i>Caragana pygmaea</i> )	2-3	4	
Redosier Dogwood ( <i>Cornus stolonifera</i> )	3-4	6	
Peking Cotoneaster ( <i>Cotoneaster acutifolius</i> )	2-3	6	
Dwarf Winged Euonymus ( <i>Euonymus alatus compactus</i> )	3-4	4	
Zabel's Honeysuckle ( <i>Lonicera korolkowi zabelli</i> )	3-4	8	
Clavey's Honeysuckle ( <i>Lonicera claveyi</i> )	3-4	4	
Dwarf Ninebark ( <i>Physocarpus opulifolius nanus</i> )	2-3	4	
Alpine Currant ( <i>Ribes alpinum</i> )	2-3	4	
Silver Buffaloberry ( <i>Shepherdia argentea</i> )	3-4	12	
Bridal Wreath ( <i>Spiraea vanhouttei</i> )	3-4	6	
Chinese Lilac ( <i>Syringa chinensis</i> )	2-3	8	
Persian Lilac ( <i>Syringa persica</i> )	2-3	5	
French Lilac ( <i>Syringa vulgaris</i> hybrids)	3-4	8-10	
Nannyberry viburnum ( <i>Viburnum lentago</i> )	3-4	8-12	
Highbush Cranberry ( <i>Viburnum trilobum</i> )	4-5	8	

Jackman Clematis ( <i>Clematis jackmanii</i> )	Glossy Buckthorn ( <i>Rhamnus frangula</i> )
Virgins Bower ( <i>Clematis virginiana</i> )	Smooth Sumac ( <i>Rhus glabra</i> )
Everblooming Honeysuckle ( <i>Lonicera heckrotti</i> )	Rose Acacia Locust ( <i>Robina hispida</i> )
Common Moonseed ( <i>Menispermum canadense</i> )	Silver Buffaloberry ( <i>Shepherdia argentea</i> )

## For Dry or Sandy Soil

### Large Shrubs or Small Trees—over 8 feet

- Siberian Peashrub (*Caragana arborescens*)
- Rocky Mountain Juniper (*Juniperus scopulorum* and varieties)

### Medium Shrubs—5 to 8 feet

- Indigobush (*Amorpha fruticosa*)

### Small Shrubs—under 5 feet

- Common Juniper (*Juniperus communis depressa*)
- Threelobe Sumac (*Rhus trilobata*)

## For Shady Places

### Large Shrubs—over 8 feet

- Shadblow Serviceberry (*Amelanchier canadensis*)
- Tatarian Honeysuckle (*Lonicera tatarica*)
- American Elder (*Sambucus canadensis*)
- Japanese Yew (*Taxus cuspidata*)
- Wayfaring Bush (*Viburnum lantana*)
- Nannyberry (*Viburnum lentago*)
- American Highbush Cranberry (*Viburnum trilobum*)

### Medium Shrubs—5 to 8 feet

- Red Chokeberry (*Aronia arbutifolia*)
- Gray Dogwood (*Cornus racemosa*)
- Pegee Hydrangea (*Hydrangea paniculata grandiflora*)
- Common Ninebark (*Physocarpus opulifolius*)
- Arrowwood (*Viburnum dentatum*)

### Small Shrubs—under 5 feet

- Japanese Barberry (*Berberis thunbergii*)
- Annabelle Hydrangea (*Hydrangea arborescens grandiflora* 'Annabelle')
- Alpine Currant (*Ribes alpinum*)
- Common Snowberry (*Symphoricarpos albus*)
- Indiancurrant Coralberry (*Symphoricarpos orbiculatus*)

## For Showy Fruits and Seeds in Fall and Winter; Also for Attracting Birds

### Very Large Shrubs or Small Trees—over 12 feet

- Shadblow Serviceberry (*Amelanchier canadensis*)—bluish red
- Hawthorns (*Crataegus species*)—yellow, red, green
- European Euonymus (*Euonymus europaeus*)—reddish orange
- Ornamental Crabapples ('Vanguard,' 'Red Splendor,' 'Radiant')
- American Mountain Ash (*Sorbus americana*)—orange red
- European Mountain Ash (*Sorbus aucuparia*)—orange red

## Large Shrubs—8 to 12 feet

- Eastern Wahoo (*Euonymus atropurpureus*)—reddish orange
- Tatarian Honeysuckle (*Lonicera tatarica*)—red or orange
- Smooth Sumac (*Rhus glabra*)—velvety red
- American Highbush Cranberry (*Viburnum trilobum*)—red

## Medium Shrubs—5 to 8 feet

- Red Chokeberry (*Aronia arbutifolia*)—red
- Peking Cotoneaster (*Cotoneaster acutifolia*)—bluish black
- European Cotoneaster (*Cotoneaster integerrima*)—red

## Small Shrubs—under 5 feet

- Winterberry (*Ilex verticillata*)
- Japanese Barberry (*Berberis thunbergii*)—red
- Native Roses (*Rosa species*)—red
- Common Snowberry (*Symphoricarpos albus*)—white
- Indiancurrant Coralberry (*Symphoricarpos orbiculatus*)—red

## Vines

- American Bittersweet (*Celastrus scandens*)—scarlet

## For Highly Colored Summer Foliage

### Large Shrubs—over 8 feet

- Russian Olive (*Elaeagnus angustifolia*)—silver
- Sea Buckthorn (*Hippophae rhamnoides*)
- Purpleleaf Plum (*Prunus* var. 'Newport')—purple
- Golden American Elder (*Sambucus canadensis* 'Aurea')—yellow
- Silver Buffaloberry (*Shepherdia argentea*)—silver
- Variegated Weigela (*Weigela florida* 'Variegata')

### Medium Shrubs—5 to 8 feet

- Royal Purple Smokebush (*Cotinus coggygia* 'Royal Purple')
- Golden Mockorange (*Philadelphus coronarius aureus*)—yellow



Goldleaf Ninebark (*Physocarpus opulifolius aureus*)—yellow  
Redleaf Rose (*Rosa rubrifolia*)—red

#### **Small Shrubs—under 5 feet**

Redleaf Japanese Barberry (*Berberis thunbergi* 'Atropurpurea')—reddish purple  
Cistena Sandcherry (*Prunus cistena*)—reddish purple

#### **Trees and Shrubs with Showy Bloom**

Flowering	Japanese Tree
Almond	Lilac
Beautybush	Hybrid Lilacs
Ohio Buckeye	Red Maple
Northern Catalpa	Mayday Tree
Bush Cinquefoil	Mountain Ash
Flowering	Russian
Crabapples	Peashrub
Highbush	Flowering Plum
Cranberry	Potentilla
Lemoine Deutzia	Eastern Redbud
White Fringetree	Roseacacia
Hawthorne	Roses
Zabel's	Spireas
Honeysuckle	Weigela
Snowhill	
Hydrangea	
Peegee	
Hydrangea	

#### **For Highly Colored Autumn Foliage**

##### **Large Trees—often over 60 feet**

Red Maple (*Acer rubrum*)—red  
Silver Maple (*Acer saccharinum*)—yellow  
Sugar Maple (*Acer saccharum*)—yellow or red  
Northern Red Oak (*Quercus borealis*)—bronzy red

##### **Small Trees—25 to 60 feet**

Ohio Buckeye (*Aesculus glabra*)—yellow to red  
River Birch (*Betula nigra*)—yellow  
Ginkgo (*Ginkgo biloba*)—yellow

##### **Large Shrubs—over 8 feet**

Amur Maple (*Acer ginnala*)—yellow to red

Smooth Sumac (*Rhus glabra*)—red  
American Highbush Cranberry (*Viburnum trilobum*)—purplish red  
Nannyberry (*Viburnum lentago*)—red

#### **Medium Shrubs—5 to 8 feet**

Red Chokeberry (*Aronia arbutifolia*)—purplish red  
Redosier Dogwood (*Cornus sericea*)—red  
Gray Dogwood (*Cornus racemosa*)—reddish purple  
Peking Cotoneaster (*Cotoneaster acutifolia*)—purplish red  
Winged Euonymus (*Euonymus alatus*)—bright red  
Clove or Golden Currant (*Ribes odoratum*)—red  
Bridal Wreath (*Spiraea vanhouttei*)—dull red  
Arrowwood (*Viburnum dentatum*)—glossy red

#### **Small Shrubs—under 5 feet**

Japanese Barberry (*Berberis thunbergi*)—red  
Rugosa Rose (*Rosa rugosa*)—yellow

#### **Vines**

Englemann Creeper (*Parthenocissus quinquefolia* 'Engelmanni')—red  
Japanese Creeper or Boston Ivy (*Parthenocissus tricuspidata*)—red

#### **For Colored Winter Stems**

##### **Trees**

River Birch (*Betula nigra*)—pinkish  
Quaking Aspen (*Populus tremuloides*)—silvery white

##### **Shrubs**

Siberian Dogwood (*Cornus alba sibirica*)—red  
Redtwig Dogwood (*Cornus sericea*)  
Yellowtwig Dogwood (*Cornus sericea flaviramea*)—yellow  
Golden Willow (*Salix alba vitellina*)—yellow  
Redstem Willow (*Salix alba chermesina*)—red